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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/660,095	09/12/2000	Achilles George Kogiantis	3-3-12	7320

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EXAMINER

AFSHAR, KAMRAN

ART UNIT	PAPER NUMBER
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2681

DATE MAILED: 09/08/2003

8

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/660,095

Applicant(s)

KOGIANTIS ET AL.

Examiner

Kamran Afshar, 703-305-7373

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 June 2003.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,2 and 4-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-2, 4-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 22 April 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ 6) ☐ Other: _____

DETAILED ACTION

Response to Arguments

1. Applicant's arguments filed 6/30/2003 have been fully considered but they are not persuasive.

To aid the applicant very kindly:

In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., in Figs. 1-4 and page 2, lines 1-14 of the specification, when a mobile station 60 initially makes contact with a base station 50, the mobile station 60 transmits channel conditions, the mobile station's degree of mobility (whether the mobile station 60 is standing still, moving slowly or moving at a relatively high speed) and the transmit configurations supported by the mobile station 60. Additionally, the base station 50 transmits its capabilities to mobile stations on a channel such as a paging channel or synchronization channel where it indicates the types of transmit configurations that are available. In an embodiment, based on the information provided by the mobile station 60 and the capabilities of the base station 50, the base station 50 selects one of four different transmit configurations for communications with the mobile station 60. The selected transmit configuration is communicated to the mobile station 60 using a control channel such as a paging channel or synchronization channel) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

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(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1-2, 4-8, 10-14, 17 are rejected under 35 U.S.C. 102(e) as being anticipated Parkvall (U.S. Patent 6,542,736 B1).

With respect to claims 1, 15, 16 & 18, Parkvall discloses a method for reconfiguring a communication system (See Title, Abstract), comprising the steps of: receiving, from a mobile station, mobile station capability information (e.g. maximum data rate / channel quality, See i.e. Co. 5, Lines 13-27, Fig. 2) / mobility of the mobile station (e.g. as the mobile terminal moves or radio channel conditions change, See Co. 8, Line 65 – Co. 9, Line 9) including a plurality of the mobile station's capabilities (e.g. bit error rate, signal-to-noise interference ratio, See Co. 2, Lines 47- 62, Co. 6, Lines 54-67); and selecting one of a plurality of transmit configurations using the mobile station capability information (See Co. 8, Line 65 – Co. 9, Line 9, Co. 10, Lines 48, Figs 6-8, 11-12 & Entire).

Regarding claim2, Parkvall discloses receiving information on mobility of the mobile station (e.g. as the mobile terminal moves, See Co. 8, Line 65 – Co. 9, Line 9); and selecting step selects one of the plurality of transmit configurations using the mobile station capability information and the information on the mobility of the mobile station (See Co. 8, Line 65 – Co. 9, Line 9, Co. 10, Lines 48, Figs 6-8, 11-12 & Entire).

Regarding claim 4, Parkvall discloses receiving information on carrier to noise ratio of a communication channel; and wherein, the selecting step selects one of the plurality of transmit configurations using the mobile station capability information and information on the carrier to

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noise ratio of the communication channel (See i.e. Co. 6, Lines 54-67 & Fig. 2, Co. 11, Lines 11-42).

Regarding claim 5, Parkvall discloses receiving information on a signal to noise ratio of a communication channel; and wherein, the selecting step selects one of the plurality of transmit configurations using the mobile station capability information and information on the signal to noise ratio of the communication channel (See i.e. Co. 6, Lines 54-67 & Fig. 2, Co. 11, Lines 12-42).

Regarding claim 6, Parkvall discloses receiving information on an error rate; and wherein, the selecting step selects one of the plurality of transmit configurations using the mobile station capability information and information on the error rate (See i.e. Co. 6, Lines 54-67 & Fig. 2, Co. 11, Lines 12-42).

Regarding claim 7, Parkvall discloses the step of selecting comprises selecting a single antenna transmit configuration (See Co. 5, Lines 13-27, Co. 10, Lines 34-48, Fig. 8, Co. 11, Lines 12-42).

Regarding claim 8, Parkvall discloses the step of selecting comprises selecting a selection transmit diversity transmit configuration (See Co. 5, Lines 13-27, Co. 10, Lines 34-48, Fig. 8, Co. 11, Lines 12-42).

Regarding claim 10, Parkvall discloses the step of selecting comprises selecting a multi-output and multi-input transmit configuration (See Co. 5, Lines 13-27, Co. 10, Lines 34-48, Fig. 8, Co. 11, Lines 12-42).

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Regarding claim 11, Parkvall discloses selecting a configuration that selects one of a plurality of transmit antennas (See Co. 5, Lines 13-27, Co. 10, Lines 34-48, Fig. 8, Co. 11, Lines 12-42).

Regarding claim 12, Parkvall discloses selecting a configuration that transmits using a plurality of transmit antennas (See Co. 5, Lines 13-27, Co. 10, Lines 34-48, Fig. 8, Co. 11, Lines 12-42).

Regarding claim 13, Parkvall discloses each antenna uses a different orthogonal code (See Co. 11, Lines 1-11).

Regarding claim 14, Parkvall discloses where each antenna uses a different Walsh code (See Co. 11, Lines 1-11).

Regarding claim 17, Parkvall discloses sending, from the mobile station, information on mobility of the mobile station (e.g. as the mobile terminal moves, See Co. 8, Line 65 – Co. 9, Line 9).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Parkvall (U.S. Patent 6,542,736 B1) in view of Allpress et al (U. S. Patent 6,392,988 B1).

Regarding claim 9, Parkvall discloses everything as applied above in claim 1. However, Parkvall failed teaching space time spreading transmit configuration. In the same field of endeavor, Allpress teaches space time spreading transmit configuration (See Co. 1 Line 61 – Co. 2, Line 25). Therefore, it would have been obvious to one of ordinary skill in the art at the time

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of the invention to provide above teaching of Allpress to Parkvall to facilitate space time spreading transmit configuration as suggested by Allpress (See Co. 1 Line 61 – Co. 2, Line 25).

6. Claims 19-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Parkvall (U.S. Patent 6,542,736 B1) in view of Lee (U.S. Patent 6,456,604 B1).

Regarding claims 19-20, Parkvall discloses everything as applied above in claim 1. However, Parkvall did not explicitly teach communicating the selected transmit configuration (e.g. maximum data rate / channel quality, See i.e. Co. 5, Lines 13-27, Fig. 2) to the mobile device over a control channel, wherein the control channel is at least one of a paging channel and synchronization channel. In the same field of endeavor, Lee teaches controlling / increasing data transmission to mobile terminal and detecting the maximum velocity / mobility (See Co. 7, Lines 29-39, Co. 10, Line 60 – Co. 11, Line 5) of the mobile terminal / device over a control channel; wherein, the control channel is at least one of a paging channel and synchronization channel (See Co.3, Table 1, Co. 4, Lines 29-38). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to provide above teaching of Lee to Parkvall to transmit configuration (e.g. maximum data rate / channel quality) to the mobile device over a control channel.

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Conclusion

Any inquiry concerning this communication or earlier communication from the examiner should be directed to Kamran Afshar whose telephone number is (703) 305-7373. The examiner can be reached on Monday-Friday.

If attempts to reach the examiner by the telephone are unsuccessful, the examiner's supervisor, Dwayne Bost can be reached @ (703) 308-4778. The fax number for the organization where this application or proceeding is assigned is (703) 872-9314 for all communications.



Kamran Afshar



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